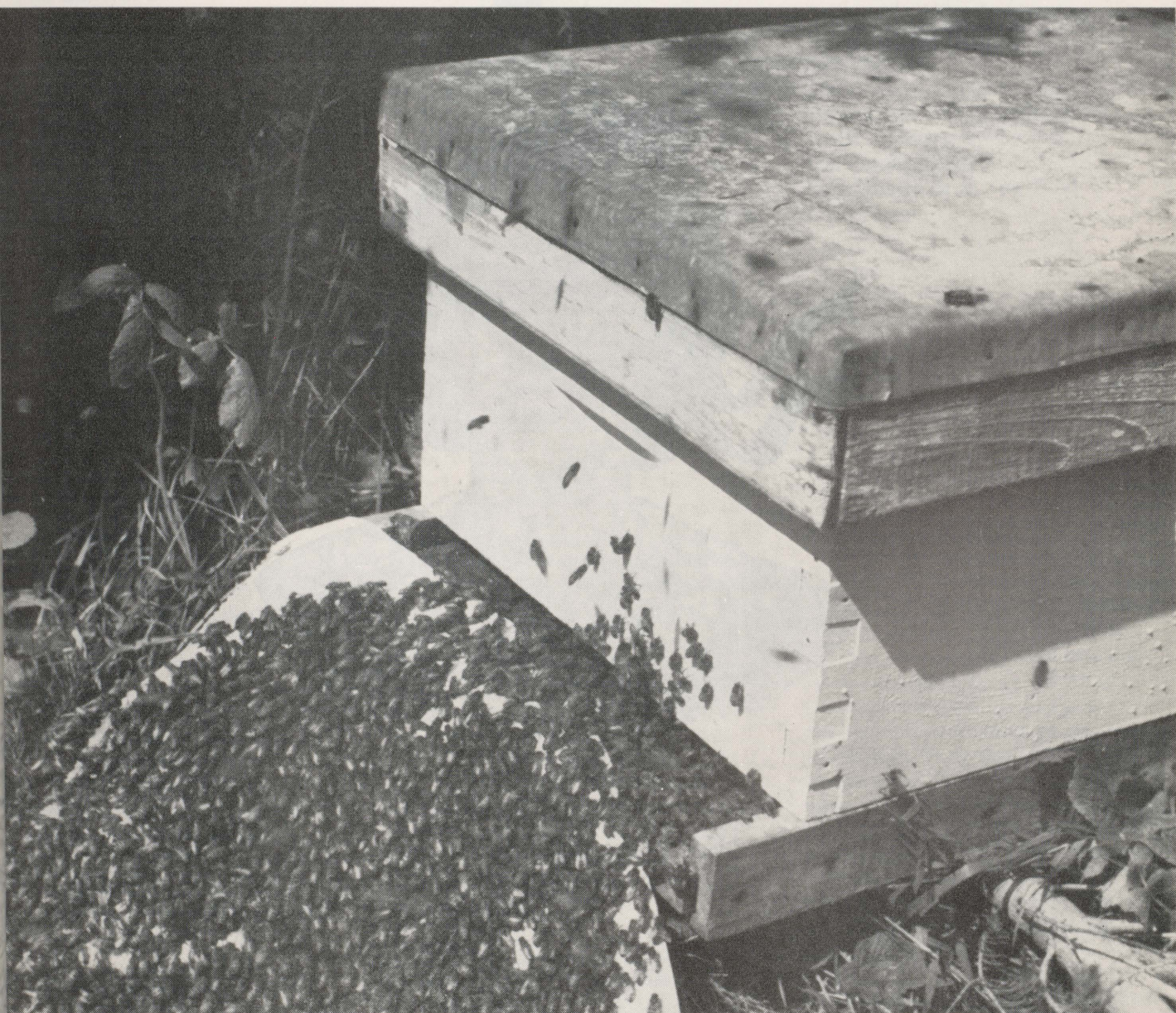


THE macdonald JOURNAL

MARCH 1974





THE MACDONALD LASSIE

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Macdonald Journal
Volume 35, No. 3
March, 1974

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The Macdonald Journal is published
every month by Ronald J. Cooke
Ltd., 451 Beaconsfield Boulevard,
Beaconsfield, Quebec, 514 697-2916.

Texts in this issue may be reprinted
editorially without permission;
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reproduce illustrations. Address
The Editor, Macdonald College,
Quebec. Second class mail registra-
tion number 0463.

Subscription rates are \$7.00 for
two years, \$9.00 for three years
in Canada, U.S.A., and foreign
rates are \$10.00 for two years.
Printed in Canada

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Journal Jottings

I was afraid that neither the average
consumer nor staunch women's
cooper would have been proud of
me one morning last week. I had
my fingers pointed at me and the odd
complimentary "she over there
couldn't understand" thrown at
me. I said nothing; I even smiled.
Things were going just as I
expected. And what I wanted was
an unprepared, unrehearsed
discussion on dairying — the type
friendly debate that could take
place wherever two dairy farmers
met.

The flight of the farmer from his
dairy operation; the plight of the
farms who are trying to hang on;
how to entice young men into the
business, and how to educate the
consumer while asking her to dig
a little deeper into her change
over for a quart of milk — these
are just a few of the areas that Rudi

Dallenbach, Farm Director of
Macdonald College, and Norman
Campbell, Manager of the Dairy
Herd Analysis Service, delved into.

Some dairy farmers may not
agree with all their comments; I'm
sure some policy-makers won't. As
for the consumer, I don't expect
her to sit back and smile as I
did, but I do hope that she will
understand, just a little better, some
of the complexities of producing
that quart of milk that is, as Norm
Campbell says, a "perfect food"
at any price.

I was allowed to speak once when
I said, "Thank you, gentlemen,
you've run out of tape." That's
when I stopped smiling because
I knew I had to condense over an
hour's conversation into an article
for this issue. No small task but
the results I think you'll find of
interest.

Hazel M. Clarke.

Need Summer Help?

Some of the most enthusiastic and
successful students in Diploma
Agriculture are young men and
women with urban backgrounds.
And, according to Dr. Norman
Lawson, Director of Diploma
Agriculture, the trend to increased
enrollment from the city is likely
to continue. However, it brings a
new problem; the diploma course
requires the student to have farm
experience and too often, because
of this inexperience, he (or she)
cannot find work for the summer
on a good farm, even though
keen and willing.

If you have a place on your farm
for one or two agriculture students
this summer — no favours asked —
send a letter to the Editor with a
short description of the position
available. We will post it on the
bulletin board.

No doubt by now many of our readers have heard numerous accounts and rumours in recent weeks regarding the future of Macdonald College. Some of these may be fact while others are likely purely fiction. The point is that no decision has yet been made regarding whether agriculture, food science, biological science, and renewable resources should be taught in Ste. Anne de Bellevue or in Montreal.

What has happened is that the McGill Senate has voted (28 to 22) to accept the McGill Planning Commission recommendation that the Faculty of Agriculture should be relocated on the McGill Campus providing adequate funding (\$9.2 million) is forthcoming from the Quebec government. The matter was then referred to the Board of Governors where the whole affair has been tabled indefinitely to allow other alternatives to be adequately investigated. That is where the matter stands presently — exactly where it has stood for the past five years. It is likely going to rest in the same position for at

least another five years at which time we will go through the same procedure again.

The point I wish to emphasize is that during the past five years of supposed indecision regarding our future, the affairs of the College have been conducted in a "business as usual" manner. New academic programs, namely renewable resources, have been developed; research projects are more numerous than ever at the College, and our enrollment has increased despite the relocation of the Faculty of Education, the phasing out of collegial sciences and despite all the rumours regarding our demise. I think it is a credit to the faculty, students, and staff that they have not been diverted from their academic and research pursuits during times when other faculties and students might have been bluffed into submission.

To a student considering a career in agriculture, food, biology, or natural resources, but who is reluctant to enter an uncertain environment, I would repeat that

Macdonald has made major achievements in its teaching and research programs during the past five "uncertain" years. And there is no reason to doubt that this will also be true during the next "uncertain" decade. It is this spirit of optimism and self-determination that has characterized this institution in the past that will be the key factor in causing this to happen. We are still here and we still plan to be here in five or 10 years hence.

Gordon Bachman

TALK... DAIRY TALK... DAIRY TALK... DA

The following article is a condensed version of an informal, taped conversation between Mr. Rudi Dallenbach, Farm Director of Macdonald College, and Mr. Norman Campbell, Manager of the Dairy Herd Analysis Service.

We posed no questions; we set no format, we just asked them to give us their off-the-cuff personal views on a subject of concern to many of our readers, be they dairy farmers, prospective dairy farmers, or consumers. Here then are their thoughts on dairying.

Rudi: I've just come back from the Outlook Conference and things look pretty grim: lots of other things are being drunk, but not milk! It's quite obvious that in the last year dairy farmers had to make some serious decisions and a lot of them had to go out of business. Did they go out of business because they made enough money to retire on or was it because of the economic situation in the dairy industry? What do you think about the future of the dairy industry, and where are we heading at the present time?

Norm: I don't think there is any question at all, Rudi, but that these people go out of business because there are just simply isn't enough money to encourage them to stay. There are certain localized areas around big cities where it could be logically argued that a man went out of business because a real estate developer had a hot price for a farm property, but this could certainly be a very small percentage of the overall people leaving the industry. People are going out simply because they are not making ends meet.

Rudi: It is very true that the increased value and increased demand for farms has encouraged farmers to sell. At the same time we have to realize that between 20

and 25 per cent of our farmers are in the 60-65 age group and so, over the next few years, regardless of price or anything else, we are going to have a decline in the number of farmers. The question is are we going to have a decline in the number of animals producing milk or do you think there is a trend now to get into a somewhat larger operation and keep enlarging?

Norm: We've been losing farmers at a fairly high rate for quite some time now but the slack has been taken up in two ways. It has been taken up by other farmers buying these dairy herds and thereby increasing slightly the number of cows that they had and also by a slight increase in the production capacity of each cow. The average production per cow in this province, and in the rest of Canada, is going up slightly, and so far it has practically offset any loss in the number of farmers we have had. But the crunch is coming because I think this is changing. The slack in production is not going to be taken up because it is the relatively few younger people in farming, who have increased their herd size and are now finding that they are not making ends meet with the high capital costs of operating, that are going out of business. I think the difference today is not so much the number of farmers but the types of farms going out of business. Let's say 5 to 10 years ago there were a lot of older farmers going out of business who were probably milking 10 to 15 cows. Under no circumstances could the farm have been considered an economic unit. However, what really should concern us today is that the farmers who are leaving are 35 to 40 years old with \$100,000

operations — 35 cows, something which should be an economic unit were the price of the product sufficient to make it such.

Rudi: How many cows do you think it takes to keep two men operating on a farm? I am sure you agree that we have to seriously think about two-man operations if for no other reason than we have to resolve the labour situation on the farm. We cannot expect farmers to work seven days a week for 365 days. We have to have the kind of farm which allows an operator and his son or an operator and employee to take some time off like any one else in the city. What size farm (number of cows) do you envisage sustaining this kind of operation?

Norm: You can speculate on this thing. If we talk in round figures, I honestly believe that it costs somewhere in the area of \$6 to produce a hundred pounds of milk. Now I think the labour and management and investment required over and above that for a person to have a reasonable income is probably another \$4. So I think that if the farmer is going to be competitive with the other segments of society who are working at from \$3 to \$5 an hour in similar work, then he has to have \$10 a hundredweight. Let's take 35 cows, which a lot of people seem to think of as a family operation today. If we take 35 cows producing 10,000 pounds per cow, and I can't think of anyone staying in this business at a lower level of production per cow than that, then this gives a gross of about \$35,000 for a one-

man operation. Presumably if it were going to be a two-man operation you would have to increase the number of cows.

Rudi: I think that it would be in the vicinity of 45 cows producing 12,000 to 14,000 pounds of milk. Being good cows, you also have some sales as far as stock is concerned so your income would increase along these lines.

Norm: One thing that really has to be emphasized here is the importance of good production per unit. You talk of 12 to 14,000 pounds; I've talked of 10 being a minimum. On DHAS we have people producing from levels of 8,000 up to 16,000 and there's no question that even before looking at the number of cows, the tremendously important thing is the production of milk per cow. We have people with 30 cows (I'm talking about family operations here) who I know are making a lot more money today than some people with 55 to 60 cows.

Rudi: The thing bothering me is that in this province we had a dairy herd of 1 million cows which has gone down to somewhere around 900,000 which, of course, is part of the whole decline in the dairy industry. At the same time we had a trend towards more use of artificial insemination and we've improving that dairy herd. We are also selling at an increasing rate to other countries. When you look at the dairy herd in this province, the top is skimmed off for sales and is not here to reproduce and keep upgrading our dairy herds. This is going to

hamper us in maintaining the status we have in the world as a producer of very high quality dairy animals.

Norm: I've felt for some time that it is ridiculous for a dairy producing province to sell off good stock. I think we should differentiate a little though. We are probably selling some of the top conformation animals, and it doesn't necessarily follow that these always fall into the top production. But I guess you could say generally that we are selling better than average cows and this will have a detrimental effect upon the industry. However, the breed associations would argue that this is not the case. They feel that the revenue these animals are contributing to the breeders is contributing more to the Quebec economy and that there are more good animals where these came from. I believe that there will have to be an end to it somewhere. If you sell off your top breeding stock, then you are going to hurt the industry at home.

Rudi: If you sell off your top, then you are always up grading with the next two-thirds in your herd. You are staying at a certain level all the time and are not really going ahead. Cows going elsewhere might be used in a very extensive breeding program, and that somebody else is going to be our competitor in the future and he may start out today with much better stock than we started out with. How do you manage this type of thing? We are in a free enterprise situation, and it is very difficult to encourage a farmer to keep a good animal in the herd if he can receive a high price for it. If the farmer doesn't make money producing milk, he has to make money some other way and so he

possibly will sell a good animal to have money in order to keep on operating. So we are right back to the situation where I think the consumer will have to realize that he has to pay more for dairy products. On the North American continent we are importing dairy products at a very, very large scale. The United States is importing. We are importing around 45 million pounds of butter into this country. There are only two or three countries that are actually producing more. The European Economic Community is producing more while New Zealand and Australia are producing at about the same rate or a little lower. The consumer has to realize that milk is an important product that cannot be easily substituted. We can do this with meat and with kinds of other products, but we cannot do this with milk which is still a bargain, even at a much higher cost.

Norm: This is one of the bigger problems. We should be paying 50 cents a quart for milk right now in order that we will not be paying 75 cents to a dollar for a luxury item five years from now and that is exactly what might happen. You give this story to consumers and they absolutely won't buy it. Of course, they're faced with rising costs for just about everything they buy. I don't know where this idea ever spread from but it is very difficult to convince a consumer that a farmer is not making a lot of money.

Rudi: The reason is that they have not learned to differentiate between the cash crop farmer and the farmer who processes cash crops into other products. This is where the difference lies. And these

figures should be put before the consumer. The wheat farmer used to get \$1.35 or \$1.25 for a bushel of wheat a few years ago. He still has the same fixed investment in the farm — the same tractors, the same land and everything else. Some of the variable costs, of course, are going up. Now within a year he has gone from that price to \$5 plus. There is no question about it; this man has now a lot of money in his pocket, but it is going to look a lot smaller when he starts buying fertilizer, fuel and all the things he needs to grow next year's crop. But the big farmer, the dairy farmer and the beef farmer are in a completely different situation. While the grain producer and the soybean producer were pocketing the money, the dairy farmer already had to pay much higher costs. He had to buy that feed grain and soybeans, and they have gone up just as rapidly as the increase in milk. What I think has to be done is that the price of milk has to be tied in with the increase in the cost of the inputs. What is happening is that at all times the dairy farmer gets paid about six months too late with an increase for his products. He doesn't get the increase at the time when his inputs go up. When he's in real desperation, when governments and farm organizations make an effort to bring his price up. As soon as his price goes up a little bit, his inputs pass him again, and he seems to be behind all the time. All he is doing is living off depreciation. A man who had only 10 or 40 per cent equity in his farm is the one who has to quit.

Norm: I am not sure that I can edit the consumer with the

ability to differentiate between the wheat farmer and the soybean farmer, who probably are making money now, and the livestock farmer who isn't. I think the consumer says 10 years ago I was paying just over half what I am paying now for my milk products, and obviously the man must have been making a living then or he would have gone out of business. Now here I am paying double the amount so this farmer must be getting rich. What is needed here is consumer education from two points. The consumer has to be educated to the fact that a large portion of any increase that we have had has gone into the distribution connected with milk, which could use a lot of improvement as I think we have an antiquated distribution system.

Rudi: I would agree but the processor won't.

Norm: I am speaking not so much from the processing angle as I am from the marketing angle. A lot of small dairies have been taken over by bigger ones. In Montreal there are probably eight or nine dairies, where there were 20 about 10 years ago. So instead of having 10 trucks from different dairies going on the same residential street in Montreal we probably only have four or five — but why even four or five. Milk should be considered like other groceries and placed on a supermarket shelf where the consumer goes and gets it. This is one of the inefficiencies. Now the other angle of consumer

education that really has to be worked on is that when a housewife goes to buy a quart of milk in a store she has no idea what she is buying in terms of food value, relative to other products. This has been a perennial problem. The dairy industry is selling its product on the basis of the amount of fat that's contained in it. The consumer is going to the store with some idea of buying the minimum amount of fat she can. This leads to a misunderstanding. Why do we drink milk; why do we feed milk to children; why is it considered a "perfect food" — because it is an excellent source of highly digestible protein. The consumer is prepared to pay almost the same price for a quart of skim milk as she will for a quart of 3.5 per cent fat, but this is simply because she doesn't think fat is good. She still hasn't learned the value of milk protein relative to other sources of protein. I can recall, about two years ago when there was a general milk price increase in Toronto and the head of the Ontario consumers association got all her girls out picketing at Queen's Park. A woman with four or five children was interviewed on television, and she said with this increase in milk by two cents a quart — that's it, from now on my kids are drinking soft drinks. Now that woman needed some consumer education. And she's not that different from the rest of the consumers today.

Rudi: The consumer reacts to what he or she is exposed to. I have been to the Outlook Conference where there was a western farmer who made a big speech about the fact that the Canadian consumer

should be happy for the cheap food she is getting, and that for the first time in history the farmer has money in his pocket. And this hit the press, no question about it. If hit the urban press a heck of a lot more than when Roland Pigeon afterwards said that we are losing money left and right on dairy farms. So the man from the city, who writes these articles, immediately says who's right; farmers always complain. But here we have for once a farmer who says he has money in his pocket and, of course, many consumers just cannot differentiate between that western farmer and the dairy farmer.

Norm: Education is needed but whose job is it to do the educating? Should the milk producer be doing some of it? The consumer has to be made more aware of the relative value of these food products. The housewife has a legitimate claim that she is going into the stores today and is being bombarded with higher prices on everything, but, on the other hand, if she knew enough to separate the junk from the good food, she could come out of there probably not much worse off than she was a year or two ago in terms of real prices.

I honestly feel that one of the major problems we have in dairy farming is the absence of long-term government planning. At no time have I seen an attempt made to define dairy policy any further than 12 months ahead. This is ridiculous. In order for a dairy farmer to be able to plan his future, he just has to have about five years lead

time. Probably a lot of consumers wouldn't realize this, but a decision that a dairy farmer makes in the breeding of a cow is four years away from being any milk in a pail. Consequently, I feel that making dairy policy one year at a time has to be changed. It isn't even one year at a time — changes in dairy policy are sometimes made known just prior to taking effect. Anything to do with livestock, and especially dairying, has to have long-term planning. We need long-term commitments if we are going to have this present quota type of system. Obviously four years ago we were in a state of surplus production and we needed a quota system — there's no question about it. Today we are in a state of deficit production and we don't need a quota system, but if we did away with the quota system right now would we be in a state of surplus production — I hesitate very much to say.

Rudi: You say the government is at fault here. I wouldn't go quite as far as that. I think we do have a long-term policy. The thing is that the pricing of farm products is based on a year to year basis. I don't think you can overcome this in any other way. You cannot, for instance, guarantee a farmer that he is going to receive in three years from now a certain amount. Where we are wrong as far as the dairy industry is concerned is that pricing of milk is not tied to the cost of production. Who says that milk should only increase at the beginning of the year. Possibly dairy policy has to change to the extent that we have some kind of a fluctuating price system which is going to allow

us to immediately increase as we had to do this year. We have already had two increases this year but they came only after the input prices were up and were not tied in so that they would go up equally with a margin of profit in between. A farmer should always have a margin of profit and it doesn't matter how long you plan ahead.

Norm: As part of the revenue of a milk producer is coming from a consumer subsidy, then I think there is a necessity on the part of the people administering this to give the dairy farmer at least more lead time than he is getting so he can plan ahead and I think they could as long as you have a quota system. Production is reasonably managed.

Rudi: There are too many unpredictables here, Norm. Australia had their floods — the predictions are that there may be a four per cent decline in milk production just because of those floods. Who knew that we were going to have two consecutive wet summers? Who knew a year ago that we were going to have an abundance of hay and corn in this province? We can't blame the people up in Ottawa — they didn't know.

Norm: These are short-term things but I'm talking about long-term things. It was obvious to you and me as recent as three years ago when the penalty on surplus production was \$2.40 a hundred weight that we were going to run short of milk in this country if that sort of policy was kept up for any length of time. It was too drastic a change. There were too

any people getting hurt by it and
ing out. I think it was fairly
vious to most people three years
o that we were in about the
maximum penalty situation, and I
st think a bit of common sense
licated that we were going
be short of milk because they
ere actually driving people out.
d a government can't react
at fast.

Rudi: As a farmer I didn't mind this
cause the only way in society
at you can increase your income
d better your situation is to
ve some sort of crisis. We have
shortage of milk, farmers are
ing out of the business, and
once society will realize that
omething has to be done. As long
the farmer kept producing too
ch, there was no reason why
consumer should get excited.
e only time when she is going
get excited is when there isn't
ough food around. What's more
ortant — is it food or that
our television, or an extra car.
pply and demand are still the
ngs which are going to regulate
cisions. You cannot blame
onomists or decision-makers
in Ottawa. Maybe we should
ink the government for putting
the LIFT program out West,
is putting all that wheat out of
oduction. It certainly put wheat
ces up. For the first time in my
as a farmer I have become
ortant. You can say it was
d planning; I'm sure it wasn't
eseen.

Norm: No it wasn't, but it wasn't
nned to create a shortage.
agree it's made people more
are of agriculture. There is no
ubt about it, but is it retrievable
w? What's going to revive
ry production?

Rudi: Money. If money can be made
in the dairy business you are going
to see young people go into it.
But they won't struggle along like
their old man had to.

Norm: In order to stay in farmers
are going to have to make more
money, but I'm not sure that
money will bring new people in.
First of all they don't have starting
capital. This could be partly solved
by changes in lending policies or
a capital grant system or some type
of policy change. The problem
is that to launch a \$100,000 or
\$150,000 operation today capital
is not available. And what about kids
graduating out of school today.
What does money mean to a lot
of them?

Rudi: I have young adults in my
family. Yes they have said, I'm not
going to be like my old man; I'm
not going to slave like this; I'm
not going to try and make money;
I want to go skiing, etc. But the
minute you break the ties and they
have to step out into the real
world they tell you another story.
There are a lot of sound young
kids coming up who know that
they have to go out there and
contribute to society by putting in
a day's work.

Norm: Maybe the work ethic isn't
dead, but it has had a few edges
knocked off it. The seven-day work
week is no longer acceptable to
young people regardless of
financial reward, and I don't blame
them. I think young people coming
into the business may accept
the idea of working together,
depending on the philosophy of
the individual. Five farmers, for
example, could work together either
as hard-nosed capitalists or with
a very co-operative type of

philosophy. If we can entice some
of the young people into the
industry, I can see them doing
this and being successful. I can't
see the man who has been in the
business for 10 or 20 years adapting
to this type of thing too well.

Rudi: The only way he would go
into it is through economic pressure.
For example, if he can see some
operations working satisfactorily.
As a matter of fact something
along this line is already taking place
even though farmers say they are
not doing it. They are doing it with
machinery. They are doing custom
work. In Ontario, for instance,
you have a milking relief service
which has been going for a number
of years. The more progressive
farmers take two weeks vacation
and hire the milk relief service
man.

Norm: The motivating factor is
economic pressure. The tremendous
cost of gearing up a farm
mechanically has forced a number
of people into the pooling of
machinery either through a syndicate
purchase or custom work. But
the reluctance of people in
farming is to get in so far that
somebody else is going to be
making the big decisions. There's
a tremendous resistance to going
that far. They'll stop short of a
point where they'll say I'm not the
master in my own house anymore.
Once a person has farmed for
10 or 15 years, economic pressure
will force him out of business
prior to forcing him into a
situation where he's going to
become one third decision-maker
in a farm. I'm all for it and I think
there is a generation coming which
will look at this carefully. I see

(Continued on page 19)

Honeybees

(Ramblings, Mine not Theirs)

by Dr. V. R. Vickery,
Lyman Museum and
Department of Entomology.

Most people who eat honey will have noticed that the price of honey has tripled during the past year. Canadian beekeepers have seldom produced enough honey to supply the demands of Canadian consumers, yet for many years the price of honey remained almost stable. Nearly every year, honey has been imported into Canada, mainly from Argentina and the United States. The sudden price increase has been brought about by the change of a whole nation of non-honey eaters to the state where this nation, Japan, is suddenly importing millions of pounds of honey annually. Producers were not prepared for this new, large, valuable market, so the old law of supply and demand has caused the price increase.

There appears to be no way that the shortage can be overcome in a short period of time. However, it is felt that production will increase and that the price of honey will stabilize in about five years, possibly near or slightly above the present level.

As a matter of fact, this price range is not out of line when we consider the food value of honey. Honey has been underpriced far too long.

Things like prices come to our notice rather quickly. There are many things about honey and honeybees that are much more interesting but are seldom brought to public notice. Perhaps I may be permitted to ramble about some of these.

How many people wonder about the fact that bees, honeybees, bumblebees and many wild bees, are entirely dependent upon flowering plants? How could this

come about? How many realize that a great many of these flowering plants are as dependent upon the bees as the bees are upon the flowers? Flower nectar and pollen makes up the entire food supply of most bees. On the other side, many plants such as most tree fruits, small fruits, cucurbits, legumes, etc., require cross pollination by these insects before they can produce fruit or seeds. Think how different this planet would be without these crop plants and the majority of our flowering plants. Without the insect pollinators, they would disappear.

Even if you already realized this, did you ever wonder how it all came about? We didn't suddenly have flowering plants and we didn't have insects which suddenly decided to visit these plants. The complete interdependence of the two groups evolved over a period of millions of years. It probably began with a very few plants, whose pollen was probably distributed by wind, and with a few bee-like insects, which probably fed upon caterpillars or other insects. The bee-like insects discovered that they could feed upon pollen. Many insects, besides the recognized pollinators, do this today. The development of nectaries by flowers probably occurred later. Some plants have nectaries which are not associated with the flowers. It is likely that the flower nectaries were developed from such structures. It was development of flower nectaries, which secreted sweet substances to attract insects, that made possible the development of the many and varied Hymenopteran semi-social or social insects, as we now know them. Without the development of the flower nectaries, this very close association of plants

and insects, so necessary to the survival, and so beneficial to mankind could never have taken place.

Social structure in honeybees has been made possible by the plant-insect relationship. All gradations can still be found in nature between the solitary bees which feed on other insects as well as nectar and pollen, through bumblebees to the ultimate in social development as exhibited by honeybees.

The honeybee society is strange and very complex. It is not like human society and could not survive if it was. Some people have compared the honeybee colony to a completely "anarchistic" state; others see it as true "communism". In some respects, it is both and more. Their laws, though unwritten, are rigidly enforced. The queen is not the ruler of the colony, she is the mother, little else but an egg-machine. During the peak of brood rearing in early summer, she may lay more than 2,000 eggs per day, a quantity which is greater in bulk and weight than her own body. Because she is the only female in the colony who performs this function, she is well attended and guarded and is fed continuously. If something happens to the queen, the entire population of the colony becomes demoralized, not because the "ruler" is gone but because the "queen substance", a hormone produced by queens, is gone. This substance is a continuous signal to members of the colony that all is right in the world. Should it disappear, the bees may be demoralized, but that does not mean the end of the colony. A significant reaction occurs

most immediately; certain worker bees go into action to produce a new queen from an egg laid by the old queen before she died or appeared.

In the colony, there exists a strict regime of labour. Worker bees, from the time they emerge from the cells, move through a succession of detailed duties for specified periods of time. During the first half of the life of the worker bee, all these duties are carried out inside the hive or nest. There are guards, no whips, no notice boards, no court orders, no bureaucracy, not even any schools of teaching. Each bee knows instinctively what it is supposed to do, when it is supposed to do it and for how long — and does it. They are cleaners, nurses, queen attendants, furnaces, with very accurate thermostats, air conditioners, guards, wax producers, builders *par excellence*, as well as honey producers and storers and processors of pollen.

After a few weeks, the whole function of an individual worker bee changes. She becomes a field bee, gathering nectar, pollen and water. She can search for and locate sources of supply, then return back home and communicate with bees in the colony to inform them about what she has found. By means of the intricate "tail-ggling" round and oblique dances in the honeycombs, a bee can tell the others know what kind of material she has found and the location and distance of the source from the hive. The nature of these dances is too intricate to explain here but merely imparting the information raises another problem. How are other bees able to use this information in order to travel precisely to the indicated source?

They do this with great accuracy. Bees navigate by using the angle of incidence of the rays of the sun, or by polarized light, if the sun is not visible. They can detect polarized light even though we cannot. We know, too, that bees learn and use landmarks in navigation.

The senses of bees are well developed. Bees see colours, but their range of colour-vision is quite different from ours. They cannot detect red or orange, these colours appearing as black. On the periphery of the upper range of colour, bees see yellow, which has a wave length of about 650 millimicrons. We are able to see reds up to about 800 millimicrons. On the lower end of the colour spectrum our visual range ceases with purple at about 390 millimicrons, while bees can see ultraviolet at 300 millimicrons. Ultraviolet is not only invisible to us, but includes that part of the colour spectrum which is actually damaging to the human eye.

A field bee lives and works for only about six weeks, then dies — worn out — either in the field or in the hive. If she dies inside, she is hurriedly removed and cast outside as bees are meticulous housekeepers, and a dead carcass is of no use, only a possible hazard, to the colony.

In the rigid but fascinating life of the bees, there is no room for sentiment, and there is none. In almost every way, the individual works, not for itself, but for the good of the colony. The whole society within the hive operates in many variable ways but with a common goal. A colony can be considered as a gigantic organism in which each individual plays a

tiny but essential part.

What about our own society? Would we be better off if we lived like the bees? I doubt it, since it would mean submergence of freedom of thought and action which as individuals nearly all of us would find to be quite abhorrent. On second thought, though, we have to realize that we do not actually have as much freedom as we may think we do and we do not, in general, provide for our population as well as do the honeybees.

The study of bees can be very fascinating and rewarding in an intellectual way. Many people keep honeybee colonies for the complete relaxation they are able to achieve, to forget for awhile the "rat-race". Colonies are maintained even on the roofs of city skyscrapers for this purpose, through admittedly, they must be fed sugar or honey, as flower nectar in such places is not easy to come by. Keeping bees provides excellent exercise, but let me caution you about one thing — a super full of honey is heavy. Unless you are in good physical condition and know the proper way to lift (there is a right way and a wrong way) you could develop serious spinal problems. Finally, since honey prices are high, and are likely to remain high, beekeeping can also be a very profitable sideline. If you enjoy learning about intricacy in nature, you don't mind some heavy work and exercise, and could use a few spare dollars, why not consider beekeeping — a fascinating, entertaining, profitable hobby. If you worry about stings, remember that a bee can sting only once, and the effect is usually much less damaging than the stinging tongue of some other human.

The Family

Farm

Published in the interests
of the farmers of the province
by the Quebec Department of
Agriculture

Grain Prices

All of the Quebec Department of Agriculture's regional offices are kept up to date on the latest grain prices. Anyone wishing to know them should telephone the nearest regional agricultural office directly. The telephone numbers are as follows:

RIMOUSKI	723-7818
QUEBEC	643-2400
ST-JOSEPH DE BEAUCE	397-6821
NICOLET	293-4535
SHERBROOKE	563-7080
ST-HYACINTHE	773-7401
CHATEAUGUAY	692-8288
BUCKINGHAM	986-8541
ROUYN	764-5111
L'ASSOMPTION	837-5055
CAP-DE-LA-MADELEINE	375-4761

Benefits from the use of pest control products

The 20th century has brought a higher standard of living to Canada. Pest control products have contributed greatly to an increased control over the environment in this process of betterment. During the past 20 years, pest control has changed greatly in its extent of application and effectiveness.

Of course, some claim that we have upset the balance of nature in the process. In point of fact, the balance of nature is a delusion. The only thing constant about nature is its imbalance. It is constantly changing.

Man has by necessity changed the existing checks and balances in the natural surroundings in his favour. He has had to do this in order to survive and prosper.

Little of the world's surface is serviceable to mankind. In fact 90 per cent of the people live on about 13 per cent of the land area. Climate and terrain restrict this distribution to the more hospitable areas. In Canada we use only about five per cent of our territory for agriculture purposes.

Food production

It is widely recognized that about a third of the world's population goes to bed hungry at night. Therefore, although some countries, such as Canada, produce more food than they need, this is no reason for reducing efforts to maximize efficiency in agricultural production techniques. Rather, it should be realized that hunger in the world today is caused very largely by the lack of an adequate system for an equitable global distribution of food.

The brutal fact is that the arable land available to us is shrinking relative to the surging growth of world population. Unless further improvements are made in food production and pest management, man may lose his slim margin of surplus time and energy that is needed to maintain an advanced civilization. The use of pest control products to protect food, fiber and other produce from damage or destruction by various pests and diseases cannot be stressed enough.

Losses due to pests

No crop grown in Canada is completely free of pests. Of the food that man grows, up to 90 per cent could be damaged or destroyed unless a continual effort

is made to control the losses caused by the numerous pest species.

The annual loss of agricultural production in Canada, due to insect diseases and other pests, has been estimated at over \$1500 million. That is equivalent to about a third of the total agricultural output for our country.

Large-scale production of marketable apples, potatoes and tomatoes would not be possible in Canada but for the protection afforded by pesticides. Many other fruits and vegetables would fall into the same category.

Rodents cause as much damage to crops and produce as insects do. It is estimated that each rat eats about \$5 worth of food a year and damages about three times that amount by fouling produce.

Increased productivity

Canada's farm labour force and the number of farms have been decreasing while the size of each farm has increased. About 30 years ago, a farmer's production fed about 10 persons; today's farmer feeds close to 50 persons. The volume of output and efficiency have increased many times. The use of pesticides has played a large part in this improvement in productivity.

The application of pest control products has made possible the better use of land resources. It has enabled the intensive cultivation of crops in areas best suited to production, processing and marketing.

crop rotations have been shortened historically so that the most productive crops can be grown in an area more often. This has been made possible by chemical pesticides which may inhibit or suppress the build up of insect and disease pests for many crops.

Treatments containing insecticides and fungicides are used to protect young plants during their critical early growth. Germination and survival to maturity are greatly enhanced.

Pest Control

The use of herbicides has become the most effective, efficient and economical method of controlling unwanted vegetation. Even if we wanted to return to the hoe for all pest control, we would not be able to muster the manpower on today's farms. The pressure is to produce even more food and fiber on less land with fewer hands. Herbicides allow this to take place never before.

Animal Health

Pesticides are as important to the health of domestic animals as they are to the health of humans. Annual losses in livestock and poultry production have been estimated at over \$100 million a year in Canada. These losses would have been even higher if pesticides were not used to provide a measure of protection from insects, diseases and other pests.

Supply and Demand

Proper agricultural management through the use of pesticides is beneficial in helping to alleviate extreme fluctuations in the supply

of food. To date, man has little control over weather and climate. However, he can dispense with much of the damage caused by insects, plant diseases and weeds. As long as destruction by pests runs rampant, there can be no planned agricultural economy.

The pressure of world demand for food from a diminishing available land base has resulted in more intensive monoculture agriculture. Crops bred to standards of uniformity, crowded closely on the land and grown repeatedly in the same area provide an open invitation to all sorts of pest species. If we are to feed and clothe a growing world population, adequate pest management, including the proper use of pesticides, is essential.

A Mobile Enemy

An increasing problem is the mobility of pests throughout the world. Modern transportation has enabled pests to be moved to any part of the globe. This mobility, along with a great degree of adaptability, high breeding rates and selective resistance, presents a very serious and complex situation. To counteract this constant threat, many pesticidal treatments are used to prevent new pests from entering our country. If pests do gain entry, pesticides play an active part in controlling infestations.

Public Health

Some of the most drastic and important uses of pest control chemicals have been in guarding

public health. These chemicals are used for mosquito and biting fly control. Diseases, such as equine encephalomyelitis, could be a serious human health problem in this country unless the mosquitoes that spread the disease are controlled. Pesticides are also very important in public health sanitation, which keeps our houses, farms and businesses relatively free of rats, cockroaches, flies and other carriers of disease and filth.

Conservation

Pest control products are widely used in our parks, forests and other recreation areas to control insects, and plant and tree diseases. These unpublicized pests and diseases cause greater damage to our forests than forest fires. Streams, lakes and ponds are often 'managed' from the conservation viewpoint by chemicals. Algae, weeds, parasite-carrying snails, leaches, lampreys and undesirable fish can be controlled in this way to protect other animals and fish.

Conclusion

The proper use of pesticides is of extreme importance in the care and wise use of our natural resources, especially the conservation of land. Some of the benefits derived from the judicious use of pesticides lie beyond the temporary relief of pesticides controlling a pest during critical periods of crop development. Pest management, including the use of pesticides, allows more food to be produced on less land and permits a considerable acreage of land to be kept in reserve.

Pesticides form part of a great technological team that helps remove some of the hazards in producing mankind's requirements of food and other produce. By controlling pests, we can make full use of the best-adapted land for agriculture, improve the efficiency of human labour, and set the stage so that we can conserve soil and preserve wildlife.

The things to always remember is that pesticides should only be used when necessary and as prescribed on the product label. The present philosophy is that pesticides should be used as an extremely important part of integrated pest management systems. Such systems can also include such things as cultural practices, plant breeding for resistant varieties and biological control. Canada Department of Agriculture scientists, as well as many others, are working on developing pest control systems but this is a time-consuming process and pesticides will continue to play a prominent role in pest management for the foreseeable future.

**Information Division,
Canada Department of Agriculture**

Pesticide Development

Pest control products are the creations of chemists in industrial laboratories. Today's pesticide company is quite likely to be a multinational corporation with widely diversified interests in industrial chemical, drug or petroleum production. Although the industrial chemist might be called the father of a new pesticide, his fledgling is carefully guided and

developed along the road to commercial production by a multidisciplinary team of scientists.

In developing a pesticide, a commercial objective or goal must be defined, towards which all effort is directed. The goal must be a pest (weed, insect, disease, etc.) of significant economic importance on a worldwide scale to justify the huge expenditure in a pesticide research and development program. In modern pesticide technology, the synthesis chemist is not searching for 'a needle in a haystack,' or making random selections for compounds. He is carefully guided by reference to biological patterns that have been established for various chemical families. His consideration in selecting a certain compound, or class of compound, for a synthesis program must reflect anticipated commercial activity (e.g. weed killer, bug killer, etc.), safety of a potential pesticide to farmers and homeowners, and a favourable degradation pattern relative to environmental effect. The chemist's judgment may be guided by computer analyses of established chemistry patterns to predict biological characteristics in areas such as those listed above.

Having established the chemical family that is to be considered in a synthesis program, a series of chemicals within this family are produced for preliminary investigation in various areas (e.g., commercial activity, toxicity, persistence, etc.). Initial selection of the potentially commercial compound is based on the results of a primary screening effort, involving greenhouse and small-scale field trials. This exercise narrows down the list of candidate compounds and

some preliminary toxicological studies are then performed. The intensity of investigation increases as the program progresses and some firm predictions can be made regarding the chances for a commercially successful material. Methods must be established to determine the amount of residue, if any, remaining on crops or in the soil at harvest. Toxicological studies and animal-feeding trials must be conducted to fully assess the safety of the product relative to humans and animals. Manufacturing routes must be developed and cost estimates prepared to establish the economic potential of the candidate material.

Having established a potentially viable commercial product, usually after three years of effort in the various areas described, worldwide field tests are required to confirm these indications and to assess the suitability of the product to local agricultural practices. This type of field assessment is usually carried out by the local marketing company in connection with government and university experimental farms. Canada Department of Agriculture scientists, located at field research stations across the country, provide a major contribution to the development and testing of new pesticide compounds that are particularly adapted to local climatic conditions and cultural practices. The product is applied to the crop under investigation, and a thorough observation of the response is undertaken (e.g., lack of crop damage, effectiveness on target and nontarget species, range of activity, effect on rotational crops, that is, soil persistence, residues in crops, etc.).

The overall results of this type of field testing program weigh heavily on the commercial future of the compound since these trials present the initial reading on commercial acceptability under practical conditions. This program, usually lasting three years, gradually develops from small plot trials (a few hundred square feet) to semi-commercial demonstrations of several acres, applied by the farmer with his own equipment.

A complete documentation of all the research and testing carried out on a candidate compound (e.g., toxicity and toxicology, crop residues, soil residues, environmental studies, biological performance, crop damage, etc.), is compiled by the sponsoring company and submitted to the Control Products Section, Canada Department of Agriculture, for review. The submission is critically analysed in consultation with the departments of National Health and Welfare and Environment. The various reviewing officers must be satisfied, according to scientific criteria submitted, that the product in question can be safely used without adverse effect on the environment and performs as indicated on the product label. On completion of satisfactory review, a registration number is assigned to specific product and formulation of the product in question, and it may then be offered for sale in Canada.

From the time of the initial screening test to the first commercial application of the product an average of six years may have elapsed, and the sponsoring company involved in the testing will have expended about \$10 million. Is one person or no small group

of people really carries the responsibility alone in this development process. Capable, trained scientists are needed in the analytical and toxicological laboratories, in carrying out field studies and in making economic assessments. Contributions to the success of a new compound are constantly made by capable people at various levels of responsibility who must make critical decisions, establish priorities; conduct tests and interpret results. If a commercial product is going to be successful it must survive intensive scientific examination by various disciplines, and in the end it must demonstrate its particular attributes in the field and command the attention of the user.

**Information Division,
Canada Department of Agriculture**

An Insecticide "Breakthrough"?

A new insecticide related to pyrethrum, and which is up to 30 times as strong as dieldrin and up to 100 times as strong as DDT, is not likely to be on the market for insect control for five years. Recent news that this "natural" insecticide, developed at Rothamsted Research Station, does not have the persistence problems associated with dieldrin and DDT roused excitement especially among vegetable growers. But the range and effectiveness of the product have yet to be fully tested.

It is also claimed that the insecticide has the advantages of low mammalian toxicity and low residual levels, without suffering from the

instability associated with the earlier pyrethrums. It is also likely to be relatively cheap to produce. This should extend the scope for pest control probably on a world-wide scale. The new chemical, code named NRDC 143 is being patented by the National Research Development Council.

(Farmer and Stockbreeder, 24 November 1973, page 4.)

A Useful Publication

"Handbook for the Home" is the latest in a series of modern Agriculture yearbooks published by the U.S. Department of Agriculture and aimed at helping today's consumer whether that person lives on a farm or in the city.

This year's (1973) yearbook is a handbook for the home. Family life centres around the home, and so many of the family's questions must be answered there. How do you budget and keep records? How can you make your home safer, not only in terms of fire prevention, but in the care of food and the handling of pesticides? How much can a family afford to spend on housing? What are the legal hurdles in buying a home? What about vegetable gardens, air conditioning, floors, a hi-fi system, sewing equipment, and improving our community? On and on, the questions arise — the kind of questions dealt with in this handbook, which costs \$5.70 in the United States.

News Items From "This Month With Agriculture Canada" (No. 66)
Published by the Information Division of the Canada Department of Agriculture

Eligibility — Small Farm Development Program: Some farmers eligible for benefits under Agriculture Canada's Small Farm Development Program are missing out because they are unaware of the eligibility requirements.

George Owen, chairman of the Farm Credit Corporation, the agency responsible for the Land Transfer section of the program, suggested farmers contact their local F.C.C. office to determine their eligibility and indicate clearly their wish to participate in the program before making any sale or purchase commitment.

Agroclimatic maps: Agriculture Canada agrometeorologists have developed maps which show how weather interacts with soils to affect crops.

The maps indicate such things as normal resource levels for growing barley — areas where required planting temperatures cannot be expected, or where the barley would reach heading stage, where it would reach soft dough stage, and the number of days of ripening until the first fall freeze in areas where the crop will ripen.

Barley breeding may open European markets: Agriculture Canada scientists would like to transfer

rapid starch-to-sugar converting enzymes of six-row malting barley, the type largely grown in Canada, to two-row malting varieties which are more popular on world markets. If the transfer succeeds, Canada may be in a better position to compete for world markets.

Pedigreed seed improving crops: Farmers using pedigreed seed stand a better chance of increasing crop yield per acre. The seed is produced in Canada by members of the Canadian Seed Growers' Association. Pedigreed seed enables resulting crops to withstand attacks from specific diseases.

Deadly swine disease studied: A reliable test for detecting a contagious swine disease, transmissible gastroenteritis (TGE), has been developed at Agriculture Canada's Animal Diseases Research Institute in Hull, Que.

Blood samples are checked against TGE virus grown in the laboratory. Serum from an infected pig will neutralize the virus, indicating immunity to the disease. Piglets with the disease face almost certain death. Pigs should be given a blood test before they are put on a breeding farm.

Meat inspection safeguards Canadians: Samples of Canadian meat and poultry products are sent to Agriculture Canada laboratories by the federal department's veterinary meat inspectors to be tested for residues such as pesticides and heavy metals.

The testing has been carried out for the past 15 years, and will soon include tests for detecting residues from antibiotics.

Beef consumers surveyed: Canadian palates savor roasts from young bulls as well as those from steers, according to a survey conducted in central Alberta by Agriculture Canada scientists.

Bull carcasses yield more lean meat, but consumers involved in the survey found bull roasts less tender.

A distinction is made between the two types of roasts in the United States, but at least one Agriculture Canada scientist feels the difference between the two is too small to warrant a distinction in supermarket labeling.

QWI

Arts Night

A highlight for **Scotstown W.I.** (Compton Co.) last year was a special evening featuring arts, crafts, and hobbies, to which **Wentworth W.I.** was invited. On display were four beautiful quilts, quilt point, needle point, painted and hand-drawn profile pictures, jewel work, woodcraft, a refinished chair with cane seat, partly finished pool, knitted and crocheted shawls, woven aprons, holders, mug, collections of spoons, stamps, buttons, buckles, combs, handkerchiefs, hand-tooled leather handbag, lacramé, embroidered pillowcases, shawl with knitted lace borders, knitted sweater, socks, smocked dress and blouse, handkerchiefs with tatted and crocheted edgings.

The guest speaker, Mr. Sander Kravitzsky, showed lovely Tiffany style lamp shades made of opaque coloured glass. He showed parts of the shades in the making and the drawings of the design from which he works. When the light was turned on, the lovely designed shades of colour were really beautiful. The speaker and his wife visited Europe a few years ago, and showed slides he had taken in Czechoslovakia, Yugoslavia, and Hungary. He also showed slides of the gorgeous flowers grown by his 70-year-old grandfather, still living in Hungary.

Persistence wins!

The **Dundee W.I.** was organized in 1916, the second branch in Montserrat-Huntingdon County. The Municipality of Dundee should not be too difficult to spot on the map as, lying between the American

(New York State) border and the St. Lawrence River, it forms the extreme southwestern tip of the Province of Quebec. Our W.I. was very active for many years, but as population patterns and occupations changed the membership dropped until by 1969 there were only 10 members, funds were almost nil, and there was serious talk of disbanding.

At this time, a member was in line to become County President. The late Mrs. Smallman was a charter member of Dundee, past County President, and a Past Provincial President, and it would be an honour to once again have a member become County President. With this goal in mind, and because the branch had been going so many years, we carried on. Slowly we gained new members. We began holding an annual card party, then a semi-annual one, and now, by public request, this has become a monthly fall and winter activity. We have added other community activities: each spring we sponsor a pick-up for the Salvation Army. Articles are brought to the community hall the day before the pick-up when some of our members are on hand to receive them. Next morning the trucks come, load up, and the drivers are served refreshments and they're on their way with no loss of time. We installed a large cupboard in the hall and have been buying kitchen equipment for the serving of refreshments.

Recently we held a special presentation meeting at which County President, Mrs. A. Bryson was a guest. She presented 50-year pins to two members, Mrs. N. D. McPhee and Mrs. J. Platt, who

joined the branch shortly after it began. Six members, whose service ranged from 30-45 years were presented with 25-year pins. Remaining members received membership pins. Anyone who does not wear her pin to a W.I. meeting must pay a small fine.

We are glad that we again are an active branch and we're proud to be a part of the Women's Institutes.

Honoured on 80th Birthday

Mrs. Stella Coates, one of the highly respected citizens of Brookbury, was honoured on her 80th birthday at a dinner party by her fellow **Brookbury W. I.** members (Compton Co.), at the F & L Restaurant, near Lennoxville, last August.

"Aunt Stella", as she is familiarly known by her many friends, is one of the charter members of the Home Maker's Club, which later became the Brookbury Women's Institute. This group was organized in 1919 and Mrs. Coates was one of the women who did a great deal to get it started and worked very hard to keep it going. She held many different offices, including being President. Mrs. Coates was President of the Compton County W.I. from 1952 to 1954, and, on the occasion of the fiftieth anniversary of her membership in the Quebec Women's Institutes, she was presented with a beautiful mohair blanket (from the Abbie Pritchard Fund) by the Provincial President, Mrs. George McGibbon.

Mrs. Coates, who spent most of her life in the Brookbury district,



went to the Wales Home, near Richmond, to reside in the fall of 1968. She always spends some time during the summer with her daughter, Mrs. Sterling Batley, at Brookbury, so is able to attend some of our W.I. meetings and is still an active member. On her 80th birthday Aunt Stella was accompanied by her niece, Mrs. Flora McIntyre, who pinned a beautiful corsage on her.

Everyone enjoyed a delicious chicken dinner, finishing the meal with a piece of an artistically decorated birthday cake. The guest of honour was presented with several cards and a sum of money from her W.I. friends who were present.

Highlights of 1973

Bury W.I. (Compton Co.) enjoyed seeing slides on Moscow shown by Rev. P. Gaudine of Cookshire, who had spent two weeks there. They were most interesting, but we were thankful to be living in Canada! Slides on London, England, were shown by a member's daughter, Melanie Wintle, who had, in a music group from AGRHS, spent two weeks in that city, which was a great experience. (Melanie's mother, Serena MacLeod Wintle, was a junior Institute member, in the days when we had Junior Institutes.)

At the October meeting, Diane Howell, the teacher of the new kindergarten class in Pope Memorial Elementary school reported on her work. She played tapes of the children's voices, which delighted everyone.

The making of exquisite artificial flowers from wood fibre was skilfully demonstrated by Mrs. Griffin, a member of Sawyerville branch. An interesting display of knitted and crocheted articles, beautiful garments, and a wall hanging were shown at a meeting.

Two special events were a delightful St. Patrick's Day tea, and the Canada Day parade.

Through a nurse from our area then at Senneville Lodge, a branch of St. Anne's Military Hospital for ambulatory patients, we "adopted" four elderly veterans who never get mail. We send cards to them on many occasions and gifts at Easter. The social worker at the Lodge advises us what to send. (When one of these men received his first card he wanted to send it back. He said he knew it wasn't meant for him because he **never** got any mail.)

Travelling Members

A member of the **East Clifton W.I.** (Compton Co.), visiting in Manitoba and North Dakota, found the beauty of the National Peace Garden a "joy to behold." Another member, on holidays in P.E.I., was fascinated by the mail boxes with the signs "W.I. member lives here." She wishes Quebec could do something similar.

All Aboard!

Franklin Centre Women's Institute (Chateaugay - Huntingdon Co.) enjoyed a trip recently to the Canadian Railway Museum at St. Constant. This museum pays tribute to the role of the railways

Left: Mrs. Stella Coates, left, member of Brookbury W. I., with her daughter Mrs. Sterling Batley.. Right: At Sutton W. I.'s 50th Anniversary: seated from left to right: Mrs. M. Lewis, Mrs. E. Westover Mrs. L. Miltimore, Mrs. F. Jenne, Mrs. I. Williams, Mrs. F. Knights, Standing from left to right are Charter Members: Mrs. L. Bresee, Mrs. N. Goyette, Mrs. C. Carr, Mrs. L. Royce, Mrs. O. Judd, Miss M. Charters, and Miss C. Perkins.

in the development of Canada through the restoration and presentation of equipment and of archive material. You can climb into the cab of CPR Number 5935 — one of the largest steam locomotives ever used in Canada and see what it was like to be at the controls.

Most equipment is enclosed in the two major buildings, and there are more than 100 pieces of railway equipment. This includes 35 steam locomotives from various Canadian railroads. One of these is CPR Number 144, the oldest Canadian-built steam locomotive in existence. Another is CNR Number 4100, the most powerful locomotive ever used in regular service in the British Commonwealth. CPR Number 2850 is the original "Royal Hudson" which pulled the Royal Train of King George VI across Canada in 1939.

There is also a collection of old streetcars from Montreal, Toronto and Ottawa. MSR Number 350 is named "The Rocket": it was the first electric streetcar used in Montreal. There are two "Golden Chariots", the open-air observation cars, once used on tours around Mount Royal in Montreal.

Dinner out rounded off a most enjoyable day.

50th Anniversary of Sutton W.I.

On October 22, 1973 some 36 ladies gathered in the hall of Sutton United Church to celebrate a half century of service for home and country. As each guest arrived she was presented with a



corsage of a single gold mum and a deep blue 50th Anniversary sash and asked to sign the guest book.

The evening began with a delicious buffet dinner catered for by two members. Seated at the head table were: Mrs. Lillian Miltimore, branch president, Mrs. Edyth Westover provincial president, Mrs. Frank Jenne of Newport, Vermont, Mrs. Merlin Lewis and Mrs. Irene Williams from Missisquoi Co. W.I., and Mrs. Fred Wright 1st Vice President of Home Co.

This branch was organized on October 24, 1923 by Mrs. Frank Anne, a long time teacher at Sutton Academy who now lives in Newport. Everyone present was delighted to have this gracious lady turn for the golden anniversary and to reminisce about the early days of the branch.

At the beginning this branch was known as Sutton Junior Girls Institute; its members were students at Sutton Academy.

One of the main objectives was to raise money for a Memorial Clock for the town of Sutton. In 1927 \$5 was deposited in the bank to start the fund. The members worked hard with all kinds of activities to raise money and, with some financial help from outside, the branch reached their goal and purchased the Clock on October 1, 1949. It was presented to the town and Township Councils and dedicated to the memory of the soldiers who gave their lives in the wars. The clock is still running today. This goal reached, the members decided to change the

name to Sutton Women's Institute. This was done in April 1950.

Mrs. Westover, Provincial President, who is a member of the Sutton Branch, brought greetings from the provincial board and read a special poem for the occasion. Mrs. Phelps read several interesting items from the old minute books. These brought back many memories to some of the members.

Mrs. Cecil Carr presented, as an anniversary gift, two attache cases — one for the president and one for the secretary to be used by them while in office and by those who will follow.

A business meeting followed after which members were entertained with a monologue in four parts by Mrs. Irene Williams.

A Happy 50th

On October 24, the **Huntingdon Women's Institute** (Chateaugay - Huntingdon Co.) celebrated their Fiftieth Anniversary. The first meeting was held on November 29, 1923, in the County Building, when Mrs. W. F. Stephen (Laura Rose) was elected first president. Minutes of this first meeting, and of the first regular meeting held two weeks later were read. At this latter meeting there were 80 ladies in attendance. Highlights of early meetings were read, and we today must always remain impressed with the efforts the ladies made to get to their meetings before the days of good roads and cars. Some early projects were noted: one of these was the renting by the W.I. of a room in a local home

where women in town to shop could stop to rest and enjoy a cup of tea.

Two Charter Members, Mrs. W. Tully, and Mrs. W. Jamieson, were honoured for their active membership through the 50 years and were each presented with a corsage.

W.I. members from other branches in the County, and other invited guests enjoyed the greetings and encouragement for all W.I.'s extended by the Provincial President, Mrs. J. W. Westover. Mrs. L. Burgess, Provincial Secretary and member of Huntingdon W.I. presented a corsage to Mrs. Westover. Mrs. J. Robertson, County Vice-President, congratulated the branch for their long record of success.

Singing, violin solos, poetry, and recitation were part of the afternoon program. A group of eight young people, dressed in old-time outfits, sang a number of lively and entertaining songs of yesteryear. Refreshments were delicious, and a special Anniversary Cake centred the head table. Each guest was presented with a pen as a souvenir of a happy occasion.

50 Years for Aubrey-Riverfield

Riverfield Curling Club was beautifully decorated for the Fiftieth Anniversary of **Aubrey-Riverfield Women's Institute** (Chateaugay-Huntingdon Co.). The event was held on the actual date of formation, October 17.

Special guests for the afternoon were Provincial President, Mrs.



Four Charter Members of Aubrey-Riverfield W. I.: Mrs. William Allen, Mrs. Andrew Allen, Mrs. James Bruce, and Mrs. Gordon Easton at the branch's 50th Anniversary party.

J. W. Westover, of Sutton, and County President, Mrs. A. Bryson, of Dewittville. The head table was centred with a beautiful anniversary cake which was the work of one of our members. It was made in the shape of our Motto pin and suitably inscribed. Our four Charter Members, Mrs. Andrew Allen, Mrs. William Allen, Mrs. James Bruce, and Mrs. Gordon Easton were seated at the head table. Mrs. Andrew Allen and Mrs. James Bruce are each in their 94th year and remain active members. A guest book was signed by 98 guests and members. Members were present from each of the seven other branches in the County.

The account of the organization meeting and first minutes were read. The history of the 50 years had been prepared and was read. Tribute was paid to the nine faithful members who got the branch off to such a good beginning. Fifty-year Bar Pins were presented to the four Charter Members. A beautiful solo "How Great Thou Art" was sung by a prospective member. One of our first members had been a great entertainer, and one of her readings, "Women versus Machinery" was read and greatly enjoyed. Greetings and good wishes were given by Mrs. Westover, Mrs. Bryson and branch presidents. Mrs. Christina Morris, a new member and an artist, made woodblock prints of Aubrey Bridge and of Riverfield Church. A souvenir card with the two pictures was presented to each lady present.

A delicious lunch of dainty sandwiches, relishes, squares, cookies,

coffee and a piece of Anniversary cake was served bringing a happy afternoon to a close.

Dear W.I. Members

Thinking of branch activities during the past year we find some things standing out vividly in our minds and so it is with those of us who attended the Q.W.I. Semi-Annual Board Meeting. For me — it was a young, working wife and mother who rose to her feet and told us how she and some of her friends would find the W.I. program of interest and help to them. The wife of our guest speaker, this lady lives in a rural area. Naturally, one of our members soon crossed the room to discuss membership with a nearby branch. Let's look around, ladies. We have something to offer women of all ages.

A new idea? A luncheon meeting at the home of Mrs. M. Lewis (Fordyce) with Mrs. Hawke, a member and teacher of special education at St. Helen's School, as co-hostess assisted by six girls from her class helping to serve and receive the guests. They helped arrange the buffet table and do the dishes. This was a special lesson for the girls and fit in with their courses. The girls did well and enjoyed the experience! They were presented with corsages and Christmas aprons. Provincial President Mrs. J. W. Westover was a special guest among the 32 present.

Cowansville's Health and Welfare Convener brought a list of elderly people to the meeting with a suggestion that a real effort be

made to visit them in the New Year.

A beautiful sealskin mat with the letters Grise Fiord, N.W.T. in different coloured sealskin was received by **Rawdon** as a thank-you from the Eskimos. Hearty congratulations to **Dennison Mills** on the celebration of their 50th anniversary. All reports show it was a memorable occasion.

In answering the roll call at **Waterloo Warden**, only one member could correctly give her neighbour's weight in centigrams.

Granby Hill had a winter picnic with an attendance of 52 (members and their families) in a church hall. Members brought their lunch, dishes and all. After supper everything left over was packed back into boxes so no one had to work in the kitchen. Then, while the children played games and some older folks enjoyed a game of cards, the rest had a good visit.

Each **Melbourne Ridge** member is to have a card party or other social event to raise funds.

"I am a citizen of Matagami, and can play an important role in improving it" was the topic chosen by **Matagami** for the Literary Competition at the school. In closing (from a convener's letter), the most successful branches are the ones which "do" or learn something at every meeting with a **planned** program. Younger women will not go to a meeting just for tea.

Mrs. Perley Clark,
Q.W.I. Publicity Convener.

rn from page 7)

me large, dairy operations
ming in. I see the situation
ere you are going to have a
w specialist on a farm and
u are going to have a crop
pecialist and probably a financial
anager. This might be five
yners, each one with a speciality.
we can entice some of the
unger generation into the
usiness with the prospects of
aking some money, which I'm not
nvinced is the motivating
ctor, then I can see it working.

di: A social change has to take
ce and it is taking place in a
mber of ways. The younger
eneration is more community
ented and more people oriented
an the older individualist.

hink dairy farming is here to
y and what it takes is exactly
at our governments, private
enterprise, and co-operatives have
en doing in this province. We
e building a processing plant
e soybeans. Once you have a
rocessing plant there will be farms
roducing soybeans because
ere is a market. And the same
ng has happened with corn. Once
e have a few more elevators the
rastructure is there in order
market the product. We have
e dairies. Once we have the
vators which can process or
ly grain crops, they are going to
produced. You are also going
see farmers, who are operating
the present time, go out and
rt custom work to supplement
eir revenue by working these
ds. What may happen in many
ses is that this land is going
be rented.

Norm: This is one of the big
changes coming in farming. I think
we are making considerable progress
in getting away from the old
philosophy of absolutely having to
own the land that you're working.
I can see a lot more long-term
leasing agreements coming. And
I see larger cow operations coming
with from three to six partnerships.
I can see this farm vertically
integrating itself in that it is going
to be almost a self-sufficient unit
producing their own protein
requirements, their own grain

requirements, their own forage
requirements right on the farm.

Rudi: There are two ways to look
at this — one is that the government
could step in and purchase land.
We have a number of programs
like this going. The government
steps in and, with the taxpayers'
money, land is purchased and
held and then rented out to farmers
and the other one is that private
enterprises or individuals invest
money in land. What they will be
doing is becoming part of the

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agricultural sector. All of a sudden we have the consumer in town, who also owns some land and becomes a part-time farmer next to the farmer who is out there. This will create a much better understanding within urban areas of what this business of farming is really all about.

I'm not yet convinced that we still don't have too many farmers. We're talking about farm enlargement but there is a misconception about this whole business. People always say what do you mean — 70 cows, 100 cows. I mean 45 cows. The average now is under 20. All right we're talking about 45 cows and there is still going to be a number of them who have to go out just so we can have 45 cows. We're not talking about the man enlarging who is milking 45 cows now, but the one who is only milking 15. He is going out of the business.

Norm: Yes, he's going out but as I mentioned before, Rudi, the thing that really concerns me — is that people have already undertaken farm enlargement and yet cannot make a buck. This makes me feel the industry is in trouble. I know of a herd which, in the seven years I've been associated with them on DHAS, has gone from 42 to 292. This is a father, two sons, and a hired man. The father has just about withdrawn from the thing now to the point where he is the relief milking service so that the two sons get every third weekend off. They are seriously thinking about their future in the dairy business and if this enterprise goes, there goes 3 million pounds of milk. The price paid to the producer has got to go up — and fast!

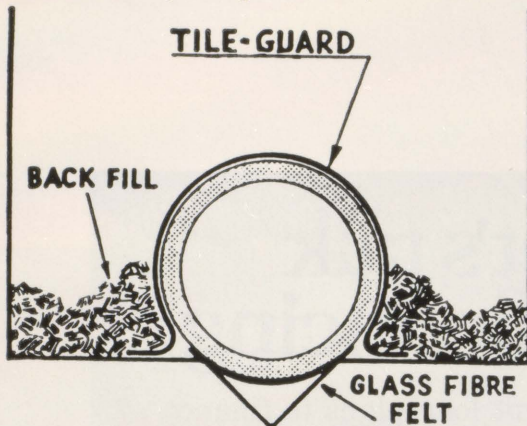
(What do you think? Why don't you let us know?).

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